ClinicalTrials.gov Protocol Registration and Results System (PRS) Receipt
Release Date: February 3, 2020

ClinicalTrials.gov ID: NCT04257656

Study Identification

Unique Protocol ID:	CAP-China remdesivir 2
Brief Title:	Severe 2019-nCoV Remdesivir RCT
Official Title:	A Phase 3 Randomized, Double-blind, Placebo-controlled, Multicenter Study to Evaluate the Efficacy and Safety of Remdesivir in Hospitalized Adult Patients With Severe 2019-nCoVRespiratory Disease.
Secondary IDs:	

Study Status

Record Verification:	February 2020
Overall Status:	Not yet recruiting
Study Start:	February 5, 2020 [Anticipated]
Primary Completion:	April 3, 2020 [Anticipated]
Study Completion:	May 1, 2020 [Anticipated]

Sponsor/Collaborators

Sponsor:	Capital Medical University
Responsible Party:	Principal Investigator Investigator: Bin Cao [bcao] Official Title: Professor Affiliation: China-Japan Friendship Hospital
Collaborators:	

Oversight

U.S. FDA-regulated Drug:	No
U.S. FDA-regulated Device:	No
U.S. FDA IND/IDE:	No
Human Subjects Review:	Board Status: Approved Approval Number: 2020-16-K13 Board Name: Ethics Committee of China-Japan Friendship Hospital Board Affiliation: China-Japan Friendship Hospital Phone: Email: Address:

No 2, East Yinghua Road, Chaoyang Distri

Data Monitoring: No

FDA Regulated Intervention: No

Study Description

Brief Summary: In December 2019, Wuhan, in Hubei province, China, became the center of an outbreak of pneumonia of unknown cause. In a short time, Chinese scientists had shared the genome information of a novel coronavirus (2019-nCoV) from these pneumonia patients and developed a real-time reverse transcription PCR (real time RT-PCR) diagnostic assay.

Given no specific antiviral therapy for 2019-nCoV infection and the ready availability of remdesvir as a potential antiviral agent, based on pre-clinical studies in SARS-CoV and MERS-CoV infections, this randomized, controlled, double blind trial will evaluate the efficacy and safety of remdesivir in patients hospitalized with severe 2019-nCoV respiratory disease.

Detailed Description: In December 2019, Wuhan, in Hubei province, China, became the center of an outbreak of pneumonia of unknown cause. In a short time, Chinese scientists had shared the genome information of a novel coronavirus (2019-nCoV) from these pneumonia patients and developed a real-time reverse transcription PCR (real time RT-PCR) diagnostic assay.

Whilst the outbreak is likely to have started from a zoonotic transmission event associated with a large seafood market that also traded in live wild animals, it soon became clear that person-to-person transmission was also occurring. The number of cases of infection with 2019-nCoV identified in Wuhan increased markedly over the later part of January 2020, with cases identified in multiple other Provinces of China and internationally. Mathematical models of the expansion phase of the epidemic suggested that sustained person-to-person transmission is occurring, and the R-zero is substantially above 1, the level required for a self-sustaining epidemic in human populations.

The clinical spectrum of 2019-nCoV illness appears to be wide, encompassing asymptomatic infection, a mild upper respiratory tract infection, and severe viral pneumonia with respiratory failure and even death. Although the per infection risk of severe disease remains to be determined, case-fatality risk of 11-14% has been reported in several initial studies of seriously ill patients and case-fatality has been estimated approximately at 2% overall. Also the large number of cases in Wuhan has resulted in a large number of patients hospitalised with pneumonia requiring supplemental oxygen and sometimes more advance ventilator support.

This new coronavirus, and previous experiences with SARS and MERS-CoV, highlight the need for therapeutics for human coronavirus infections that can improve clinical outcomes, speed recovery, and reduce the requirements for intensive supportive care and prolonged hospitalisation.

Given no specific antiviral therapy for 2019-nCoV infection and the ready availability of remdesvir as a potential antiviral agent, based on pre-clinical studies in SARS-CoV and MERS-CoV infections, this randomized, controlled, double blind trial will evaluate the efficacy and safety of remdesivir in patients hospitalized with severe 2019-nCoV respiratory disease.

Conditions

Conditions: 2019-nCov

	Remdesivir
Keywords:	

Study Design

Study Type:	Interventional
Primary Purpose:	Treatment
Study Phase:	Phase 3
Interventional Study Model:	Parallel Assignment
Number of Arms:	2
Masking:	Quadruple (Participant, Care Provider, Investigator, Outcomes Assessor)
Allocation:	Randomized
Enrollment:	452 [Anticipated]

Arms and Interventions

Arms	Assigned Interventions
Experimental: Remdesivir group active remdesivir	Drug: Remdesivir RDV 200 mg loading dose on day 1 is given, followed by 100 mg iv once-daily maintenance doses for 9 days. Other Names: • GS-5734
Placebo Comparator: Control group Placebos matched remdesivir	Drug: Remdesivir placebo RDV placebo 200 mg loading dose on day 1 is given, followed by 100 mg iv once-daily maintenance doses for 9 days.

Outcome Measures

Primary Outcome Measure:

1. Time to Clinical Improvement (TTCI) [Censored at Day 28]
   TTCI is defined as the time (in days) from initiation of study treatment (active or placebo) until a decline of two categories from admission status on a six-category ordinal scale of clinical status which ranges from 1 (discharged) to 6 (death).

   Six-category ordinal scale:

   6. Death; 5. ICU, requiring ECMO and/or IMV; 4. ICU/hospitalization, requiring NIV/ HFNC therapy; 3. Hospitalization, requiring supplemental oxygen (but not NIV/ HFNC); 2. Hospitalization, not requiring supplemental oxygen;

   1. Hospital discharge.

   Abbreviation: IMV, invasive mechanical ventilation; NIV, non-invasive mechanical ventilation; HFNC, High-flow nasal cannula.

   [Time Frame: up to 28 days]

Secondary Outcome Measure:

2. Clinical status
   Clinical status, assessed by the ordinal scale at fixed time points (days 7, 14, 21, and 28).

   [Time Frame: days 7, 14, 21, and 28]

3. Time to Hospital Discharge OR NEWS2 (National Early Warning Score 2) of ≤ 2 maintained for 24 hours.
   Time to Hospital Discharge OR NEWS2 (National Early Warning Score 2) of ≤ 2 maintained for 24 hours.

   [Time Frame: up to 28 days]
4. All cause mortality
   [Time Frame: up to 28 days]
5. Duration (days) of mechanical ventilation
   [Time Frame: up to 28 days]
6. Duration (days) of extracorporeal membrane oxygenation
   [Time Frame: up to 28 days]
7. Duration (days) of supplemental oxygenation
   [Time Frame: up to 28 days]
8. Length of hospital stay (days)
   [Time Frame: up to 28 days]
9. Time to 2019-nCoV RT-PCR negativity in upper and lower respiratory tract specimens
   [Time Frame: up to 28 days]
10. Change (reduction) in 2019-nCoV viral load in upper and lower respiratory tract specimens as assessed by area under viral load curve.
    [Time Frame: up to 28 days]
11. Frequency of serious adverse drug events
    [Time Frame: up to 28 days]

Eligibility

Minimum Age:	18 Years
Maximum Age:	
Sex:	All
Gender Based:	No
Accepts Healthy Volunteers:	No
Criteria:	Inclusion Criteria:

1. Age ≥18 years at time of signing Informed Consent Form
2. Laboratory (RT-PCR) confirmed infection with 2019-nCoV.
3. Lung involvement confirmed with chest imaging
4. Hospitalized with a SaO2/SPO2≤94% on room air or Pa02/Fi02 ratio <300mgHg
5. ≤12 days since illness onset
6. Willingness of study participant to accept randomization to any assigned treatment arm.
7. Must agree not to enroll in another study of an investigational agent prior to completion of Day 28 of study.

Exclusion Criteria:

1. Physician makes a decision that trial involvement is not in patients' best interest, or any condition that does not allow the protocol to be followed safely.
2. Severe liver disease (e.g. Child Pugh score ≥ C, AST>5 times upper limit)
3. Pregnant or breastfeeding, or positive pregnancy test in a predose examination

4. Patients with known severe renal impairment (estimated glomerular filtration rate ≤30 mL/min/1.73 m2) or receiving continuous renal replacement therapy, hemodialysis, peritoneal dialysis
5. Will be transferred to another hospital which is not the study site within 72 hours.
6. Receipt of any experimental treatment for 2019-nCoV (off-label, compassionate use, or trial related) within the 30 days prior to the time of the screening evaluation.

Contacts/Locations

Central Contact Person:

Central Contact Backup:

Study Officials:

Locations: **China, Beijing**
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Contact: Yeming Wang, Doctor wwyymm_love@163.com

IPDSharing

Plan to Share IPD: Undecided

References

Citations:

Links:

Available IPD/Information: